

AMENDMENTS TO THE CLAIMS

Please cancel claims 20-27 and claims 43-44.

Please amend Claim 31 as indicated below.

Claims 1-19 (cancelled).

Claims 20-27 (cancelled).

Claims 28-30 (cancelled).

Claim 31 (currently amended): A method of identifying an organic or an inorganic molecule that binds specifically to a site on a MN protein, to which vertebrate cells adhere in a cell adhesion assay, comprising testing organic or inorganic molecules in a cell adhesion assay, comprising:

(a) allowing said MN protein to bind to a substrate, to which cells do not bind;

(b) rinsing unbound MN protein from said substrate;

(c) incubating said bound MN protein with said organic or inorganic molecules, and with said vertebrate cells;

(d) rinsing unbound vertebrate cells from said MN protein; and

(e) identifying molecules that inhibit the adhesion of said vertebrate cells to said MN protein as specifically binding to said site;

wherein said MN protein is encoded by a nucleic acid whose nucleotide sequence is selected from the group consisting of:

(1) SEQ ID NO: 1;

(2) nucleotide sequences that hybridize specifically under stringent hybridization conditions of 0.02 M to 0.15 M NaCl at temperatures of 50°C to 70°C to the complement of SEQ ID NO: 1; and

(3) nucleotide sequences that differ from SEQ ID NO: 1 or from the nucleotide sequences of (2) in codon sequence due to the degeneracy of the genetic code.

Claim 32 (previously presented): The method of Claim 31 wherein said molecule is organic.

Claim 33 (previously presented): The method of Claim 31 wherein said molecule is inorganic.

Claim 34 (previously presented): The method of Claim 32 wherein said molecule is a protein or a polypeptide

Claim 35 (previously presented): The method of Claim 34 wherein said protein or polypeptide comprises an amino acid

sequence selected from the group consisting of SEQ ID NOS: 107, 108, 109, 137 and 138.

Claim 36 (previously presented): The method of Claim 32 wherein said polypeptide is selected from the group consisting of SEQ ID NOS: 107, 108, 109, 137 and 138.

Claim 37 (previously presented): The method of Claim 31 wherein said organic or inorganic molecule, when in contact with a vertebrate preneoplastic or neoplastic cell that abnormally expresses MN protein, inhibits the growth of said cell.

Claim 38 (previously presented): The method of Claim 31 wherein the site on the MN protein to which said vertebrate cells adhere in said cell adhesion assay is within the proteoglycan-like domain or within the carbonic anhydrase domain of the MN protein.

Claim 39 (previously presented): The method of Claim 31 wherein the site on the MN protein comprises an amino acid sequence selected from the group consisting of SEQ ID NOS: 10 and 97-106.

Claim 40 (previously presented): The method of Claim 31 wherein the site on the MN protein comprises an amino acid sequence selected from the group consisting of SEQ ID NOS: 10 and 97-106.

Claim 41 (previously presented): The method of Claim 31 wherein said vertebrate cells are mammalian cells.

Claim 42 (previously presented): The method of Claim 31 wherein said vertebrate cells are human cells.

Claims 43 and 44 (cancelled).